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Climate Change Adaptation and Development Planning: A Geographical Perspective

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THESIS MANUSCRIPT



Climate Change Adaptation and Development Planning: A Geographical Perspective

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requirements for the award of the degree of
Doctor in Sciences by*

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Abstract

Climate change presents irreducible uncertainties which require integrative, strategic, and innovative ways to manage risk. In this context, development planning is often presented as a promising candidate for fundamentally reinforcing key aspects of climate change adaptation. Yet, the construction of narratives underlying the idea of 'planning for climate' remain dominated by the natural sciences and focused on environmental rather than social change. In response, this research suggests that a geographical perspective, i.e. studying the relations between society and the 'natural' environment, can provide valuable insights for examining the potential role of development planning in building integrative ways to manage space under climate change uncertainties. Following the elaboration of a conceptual framework defining the key features of a geographical perspective, the idea of 'planning with climate change' is embraced for appraising the socionatural reality of climate change from which three main research gaps are identified and addressed: (i) re-situating municipal planners' knowledge on climate change, (ii) understanding development actors' perspectives on adaptation, and (iii) developing relational accounts of planning practices under climate change uncertainties. In order to address these gaps, a mixed-method research is developed and implemented, providing a geographical practice that forges creative connections between socio-cultural and spatial-analytical geographies. Based on a case study analysis of the island province of Bohol in the singular archipelagic context of the Philippines, a dataset is built containing pre-constructed data (development planning documents, census data) and self-constructed data (in-depth interviews, survey questionnaires, mental maps) from the national, regional and local level. Both statistical and interpretive discourse analysis is performed, informed by quantitative and qualitative spatial-analytical methods.

Main results first highlight that development planning in the Philippines involves an important diversity of social actors engaged in both planned and autonomous adaptation processes. Then, further in-depth interviews with planning officers from the coastal municipalities in Bohol show that climate change has worked its way into a set of discourses that are beyond climate knowledge as brought about by

the institutional processes of mainstreaming climate change adaptation. Planning officers' understandings and engagements with climate change are built upon both scientific and non-scientific ways of knowing, offering a venue in which experiential knowledge on climate change can be used for building planning significance. Meanwhile, focusing on actors from both government and civil society organisations, results from a Q-method survey provide evidence that, while differentiated viewpoints may lead to divergent perspectives on adaptation, these perspectives hold commonalities suggesting that shared adaptation strategies can emerge across organisational structures and scales. Lastly, a combined analysis of the main research material collected using concepts from Actor-Network Theory (ANT) highlight that development planning's dominant modes of ordering tend to focus primarily upon the physical characteristics of places and struggles to adequately engage with spaces of heterogeneity and fluidity brought about by climate change uncertainties. Evidence are therefore provided for some amendment to planning processes so that more inclusive approaches, oriented towards topological conceptions of space, can be brought into being for improving climate change adaptation. Used increasingly to address issues pertaining to nature-society relationships, the continued use of mixed-method research mobilizing socio-cultural and spatial-analytical methods is supported as an insightful mode of enquiry able to capture the multiple realities of climate change.

Contents

1. Introduction	23
1.1. Background.....	23
1.2. Main research objectives.....	26
1.3. Thesis outline	28
2. Conceptual framework.....	31
2.1. Unpacking the geographical perspective(s).....	34
1) <i>No single paradigm or method of enquiry</i>	35
2) <i>Concern for social and biophysical processes</i>	35
3) <i>Space is the focus of enquiry</i>	36
4) <i>Outcomes and operation of processes differ from place to place</i>	36
5) <i>Process-based explanations focused on structures and systems</i>	37
2.2. Engaging with post-structuralist thinking and hybrid geographies.....	38
2.2.1. Defining the geographical perspective embarked within this research.....	39
1) <i>Recognizing the situatedness of knowledge</i>	39
2) <i>Engaging with relational space</i>	40
3) <i>Focusing on spatial formations</i>	41
4) <i>Concern for structures and systems</i>	41
5) <i>Thinking across the traditional nature-society dichotomy</i>	42
6) <i>Developing hybrid' geographies and relational analysis</i>	43
2.2.2. Key features of our geographical perspective.....	44
2.3. Framing climate change adaptation and development planning.....	45
2.3.1. Recognizing the socionatural reality of climate change.....	46
2.3.2. Adaptation as a problem of development.....	50
1) <i>Adaptation as a social process</i>	50
2) <i>Planning with climate change</i>	51
2.4. Areas of work and specific research objectives.....	53
2.4.1. Exploring the local meanings of climate change knowledge in a municipal planning context.....	53
2.4.2. Understanding multiple perspectives on adaptation among development planning actors.....	54

2.4.3. Developing relational understandings of planning practices under climate change uncertainties	55
2.5. Synthesis	56
3. Research design	58
3.1. Developing socio-cultural and spatial-analytical geographies	61
3.2. Case study	63
3.2.1. Climate change adaptation in an archipelagic context: the Filipino case	64
3.2.2. The Filipino planning system and governance structure	67
1) <i>The decentralized governance structure</i>	67
2) <i>The local development planning model</i>	68
3) <i>The openings for public participation</i>	72
3.2.3. The island of Bohol	73
3.3. Research activities	78
1) <i>Reviewing climate change adaptation initiatives</i>	78
2) <i>Re-situating local meanings on climate change</i>	79
3) <i>Capturing multiple viewpoints across scales</i>	80
4) <i>Tracing the network topologies of development planning</i>	80
3.4. Data overview	83
3.4.1. Collecting data	83
3.4.2. Building datasets	84
3.4.3. Mixing data	88
3.5. Key features of the mixed-method approach developed within this study	89
4. Exploring municipal planners' knowledge on climate change	90
4.1. Introduction	93
4.2. The integration of climate change adaptation into local development planning practices	96
4.2.1. The government's mainstreaming approach	96
4.2.2. The municipal planning and development coordinator	98
4.3. Appraising local development planning practices	101
4.4. Constructing geographical data on planning practices	104
4.4.1. Talking to key actors from local development planning	104
4.4.2. Collecting documents, plans and programs	108
4.4.3. Key challenges in appraising local development planning practices	109

4.5. Building geographical interpretations.....	111
4.5.1. Mapping the integration of CCA into local development planning.....	112
4.5.2. Developing an interpretive strategy for analysing interview transcripts and documents.....	115
4.5.3. Locating planning officers' perception of climate risks.....	117
4.6. Results: Making space for experiential knowledge in climate change adaptation? Insights from municipal planning officers in Bohol, Philippines.....	121
A. Abstract.....	122
B. Background.....	123
C. Development planning and climate change knowledge.....	125
D. Climate change adaptation and local development planning in Bohol, The Philippines.....	127
E. Data collection.....	130
F. Interpretational strategy.....	131
G. Planners' experiential ways of knowing climate change.....	132
a) <i>Planners' observations of a changing climate</i>	132
b) <i>Planners' experiences of climate-related issues</i>	134
c) <i>Planners' tools and practices</i>	136
H. Building planning significance through scientific and non- scientific ways of knowing.....	137
I. Applying experiential knowledge into action.....	138
J. Conclusion.....	139
K. Acknowledgments.....	141
4.7. Synthesis.....	142
5. Understanding development actors' perspectives on adaptation.....	144
5.1. Introduction.....	148
5.1.1. A system-based approach to adaptation and development planning.....	148
5.1.2. Mapping out development actors and adaptation initiatives.....	150
5.1.3. A twin-track approach to adaptation and development planning.....	152
5.2. The Q-method.....	154
5.2.1. Method description and assets.....	155
5.2.2. Method implementation.....	157
1) <i>Concourse elaboration</i>	158

2) <i>Data collection</i>	160
3) <i>Data analysis</i>	162
4) <i>Factor interpretation</i>	164
5.2.3. Methodological choices	167
1) <i>Q factoring: FA vs PCA</i>	169
2) <i>Factor rotation</i>	170
5.2.4. Q vs R	173
5.2.5. Challenges in implementing the Q-method	174
5.3. Results: Capturing multiple social perspectives on adaptation across scales: A Q-method analysis of actors from development planning in the Philippines	176
A. Abstract	177
B. Introduction	178
C. Study area	180
D. Method and data	184
E. Results	188
a) <i>The institutional perspective</i>	192
b) <i>The grassroots perspective</i>	193
c) <i>The developmental perspective</i>	195
d) <i>The physical planning perspective</i>	196
F. Discussion	197
G. Conclusion	200
H. Acknowledgments	201
5.4. Synthesis	202
6. Planning <i>with</i> climate change: towards topological modes of orderings	205
6.1. Introduction	207
6.2. An ANT approach to development planning and climate change adaptation	208
1) <i>ANT characteristics</i>	209
2) <i>Topological space</i>	211
3) <i>Modes of ordering</i>	212
4) <i>ANT and development planning</i>	213
6.3. Specific research questions	215

6.4. Data & Method	215
6.5. Integrating CCA into local development planning: The case of Bohol, Philippines	216
6.6. Weather variability and the provisional 'permanence' of space	218
6.7. The municipal CLUP documents as intermediaries	220
6.8. The delineation of disaster risk areas and land use zones	222
1) <i>Participation as mandatory passage point</i>	222
2) <i>Cartographic representation as rational technoscientific knowledge</i>	223
3) <i>Road network mapping for managing disaster risk areas</i>	224
6.9. The CLUP maps as producer of exclusive, topographical spaces	225
1) <i>The exclusive venues of participation</i>	225
2) <i>The topographical spaces of zoning and geo-hazard maps</i>	227
6.10. Development planning's struggle to engage with spatial multiplicities	228
6.11. Towards fluid, topological modes of orderings	231
6.12. Synthesis	233
7. Conclusions: On crafting geographical knowledge	237
7.1. What has been achieved? The contributions of this research	237
7.1.1. Planning 'for' climate change: Insights from a relational analysis	237
1) <i>Planning with climate change</i>	238
2) <i>Experiential knowledge</i>	239
3) <i>From individual actors to systems</i>	239
4) <i>From systems to networks</i>	240
7.1.2. Development planning's roles in addressing climate change	241
1) <i>Developing integrative approaches to manage risk</i>	241
2) <i>Orchestrating multiple types of climate change knowledge</i>	242
3) <i>Working at combining multiple perspectives for acting upon climate change</i>	243
4) <i>Enrolling more-than-human actors in planning practices</i>	244
7.1.3. Summary of key contributions	246
7.2. The merits of a mixed-method approach	248
1) <i>Overcoming the causality and consequence challenge</i>	248
2) <i>Appraising the situatedness of knowledge and multiplicity of meaning</i>	249
7.3. Research limitations: how partial is the knowledge crafted here?	250
1) <i>Case study</i>	250

2) <i>The focus on governments and civil society organisations</i>	252
3) <i>The Filipino formal planning system</i>	254
7.4. Planning with climate change in the Philippines: results significance for policy and practice.....	256
7.5. Perspectives: opportunities for further research.....	259
7.6. Reflecting upon my PhD journey and situating my way of knowing.....	260
7.7. General conclusion.....	263
8. References	265
9. Appendices	295
Appendix I. Q-method statements (English-Boholano).....	295
Appendix II. Q-method respondents.....	299
Appendix III. Q-method data matrix (Statements vs Q-sorts).....	301
Appendix IV. Moving beyond the Q vs R debate.....	302
Appendix V. Semi-structured interview guide.....	320
10. References	289